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Abstract

Marginalised individuals are often caught in a vicious cycle of economic or health problems, a lack of social connection, and disempowerment. The present research examines interventions that provide opportunities for social inclusion to break this cycle. Specifically, in two longitudinal field studies we examined the effect of social inclusion on self-efficacy and hope in two vulnerable groups, namely 68 residents in a drug and alcohol rehabilitation centre (Study 1), and among 48 marginalised adults taking part in activities organized by a community organisation (Study 2). Though somewhat counterintuitive, we hypothesized that social inclusion would affect self-efficacy by fostering feelings of personal autonomy. The hypothesis was supported by results from both studies revealing an indirect effect from social inclusion via personal autonomy on self-efficacy and hope. The findings are discussed in relation to how group inclusion may stimulate the development of personal autonomy in disadvantaged adults, an important factor in their recovery and mental health.

Keywords: group-based interventions, personal autonomy, social inclusion, self-efficacy, hope, vulnerable groups in society.

Personal Autonomy in Group-Based Interventions

People who experience chronic mental health problems, addiction, and other forms of social disadvantage (such as poverty and unemployment) are likely to have fewer social contacts and supports. Moreover, on average they receive less income than others in the general population, creating a vicious cycle of disadvantage (SANE_Australia, 2010; Shibusawa & Padgett, 2009). To empower these individuals to break this cycle, it has been argued that it is important to increase their sense of self-efficacy (Andresen, Oades, & Caputi, 2011; see AbuSabha & Achterberg, 1997; O'Leary, 1985 for reviews). The present paper proposes that self-efficacy can be boosted by inclusion in social groups. Importantly, and somewhat paradoxically, we expect group inclusion to foster self-efficacy through satisfying group members' need for personal autonomy.

Social and health benefits of group inclusion

An increasing body of research suggests that maintaining positive relationships and belonging to (multiple) groups positively affects people's health and wellbeing (Jetten, Haslam, & Haslam, 2012). For instance, people who have better perceived or actual social support are less prone to depression (Cruwys, Haslam, Dingle, Haslam, & Jetten, 2014a; Kilpatrick et al., 2007), posttraumatic stress disorder (Kilpatrick et al., 2007), and addiction (Dingle, Cruwys, & Frings, 2015). Social connectedness and support have been found to alleviate depressive symptoms both directly (Aneshensel & Stone, 1982; Cruwys et al., 2014a; 2014b) and indirectly, by protecting individuals against the adverse psychological impact of stressful life events (e.g., Kilpatrick et al., 2007).

Despite these benefits, not all vulnerable people receive adequate social support. Indeed, mental health problems (such as depression or addiction) often have a negative influence on people's social networks: People encountering these problems may either disengage from social contacts, or engage in contacts that can encourage harmful behavior

(such as substance abuse, Dingle, Stark, Cruwys, & Best, 2015). Group interventions are often aimed at tackling this problem by providing an opportunity for people with mental health problems to develop positive social connections with others who are in similar situations.

Research shows that group interventions in both clinical and non-clinical settings often effectively improve wellbeing (Haslam et al., 2010; McDermut, Miller, & Brown, 2001). Interestingly, for people who are at risk of being socially isolated, such as people in elderly care, it appears that participating in group activities fosters positive outcomes for health and wellbeing independently of the content of that activity (Gleibs, Haslam, Haslam, & Jones, 2011a; 2011b). Indeed, research shows that being part of both therapy groups and other community groups such as choirs, sporting and cultural groups has beneficial effects for people with mental health problems (lower relapse rates, health and emotion regulation benefits; Cruwys, et al., 2014a; 2014b; Dingle, Brander, Ballantyne, & Baker, 2013). The present research examines the process that fosters these positive outcomes.

The Importance of Personal Autonomy

To obtain long-term health benefits, it is of crucial importance that changes in behaviour result from autonomous behavioural decisions (Dwyer, Hornsey, Smith, Oei, Dingle, 2011; Rodin & Langer, 1977). When smokers, for instance, experienced high levels of personal autonomy, they perceived themselves more competent to change their behaviour and were better able to continue abstinence over a course of 5 years (Williams, Gagné, Ryan, & Deci, 2002). Autonomous or self-determined behaviour is defined as behaviour that is regulated through choice as an expression of oneself, and is generally distinguished from behaviour that is pressured by intrapsychic and environmental forces (Deci & Ryan, 1987). Self-determination theorists have suggested that when people have a sense of control over

their behaviour, and regulate their behaviour internally rather than externally, behavioural change is more sustained (SDT; Deci & Ryan, 1985).

Research shows that members of disadvantaged groups often feel disempowered, locating the responsibility for their position in the hands of others rather than their own (e.g., Clark & Nothwehr, 1999; Ruggiero & Taylor, 1995). Consequently, people who are homeless or suffer from alcohol or drug addictions may believe that they have little efficacy to change their situation. Increasing a sense of personal autonomy could be an important way to promote such individuals' self-efficacy, relating it to a range of positive consequences for individual functioning and wellbeing (AbuSabha & Achterberg, 1997; O'Leary, 1985; Strickland, 1978). Being defined as the belief that one is capable of producing behaviours that lead to specific desired effects (Bandura, 1977, p. 193), self-efficacy can empower individuals to break the vicious cycle. Bandura argued that the key to experiencing efficacy is a shift in the locus of behaviour from a stimulus to the individual. His theory focuses on the importance of behavioural reinforcement, either socially or through accomplishments. The effectiveness of these reinforcements on self-efficacy beliefs is contingent upon the internal ascription of the cause of the behaviour. In other words, the belief that one has the efficacy to attain certain goals in life should begin by experiencing one's own behaviour as resulting from autonomous and self-determined decisions.

Personal Autonomy and Social Inclusion

In this paper, we hypothesize that people can develop a sense of personal autonomy by engaging in activities that foster their inclusion in social groups. This idea may be somewhat counterintuitive. Indeed, traditionally, belonging to social groups has been suggested to threaten people's need for distinctiveness, individuality, or personal autonomy (Brewer, 1991; Codol, 1975). Corroborating this, Hornsey and colleagues (2009) suggested that cohesion in therapy groups may not always foster positive outcomes, because it can be

associated with a pressure to conform, at the cost of personal expression and autonomous behaviour (cf. Janis, 1982). Indeed, the literature on behaviour in social groups shows that people often conform to group norms (e.g. Asch, 1951; Deutsch & Gerard, 1955; Cialdini & Trost, 1998; Sherif, 1936). For instance, newcomers that enter an intervention group with positive norms regarding health behaviour will be likely to behave in line with these norms. Although such conformity may increase the effectiveness of group interventions, some scholars suggest that it should simultaneously undermine people's personal autonomy. According to Codol (1975), for instance:

> …because of [this] very conformity that is being displayed or experienced, these reference groups might be in many cases experienced or perceived as a source of anxiety by everybody. It is true that they present a standardizing and/or coercive character, which makes them seem capable of violating what each one thinks of as his/her personal identity […] and of simultaneously diminishing the autonomy each one believes (s)he enjoys. (1975, p.484)

However, there are reasons to believe that this is not necessarily the case. Indeed, studies on group processes convincingly show that collective and personal interest need not be negatively related. It appears that inclusion in social groups does not necessarily entail a loss of individuality (Hornsey & Jetten, 2014; Postmes & Jetten, 2006). Indeed, some groups may even promote individuality (Jetten & Postmes, 2006; Koudenburg, Postmes, Gordijn, & Van Mourik Broekman, 2015). So how then can social inclusion foster personal autonomy?

How can Inclusion and Personal Autonomy go hand-in-hand?

Research in the social identity tradition shows that people derive a sense of identity from their memberships in social groups (Tajfel & Turner, 1979; Turner, 1982; e.g., I am a woman, a drug addict, a survivor). According to this view, our group memberships, or social identities, inform and shape the self as they provide meaning to who we are, what we stand

for, and what we do (Jetten, Haslam, Pugliese, Tonks, & Haslam, 2010). If social groups are the building blocks that shape the content of one's identity, it is likely that group inclusion strengthens important self-aspects including one's sense of personal autonomy. For example, feeling included in a drug and alcohol recovery community could enhance one's view of oneself as someone who overcomes his or her addiction. When one decides to stop drinking, this behaviour is likely to be viewed as self-determined: "I am a survivor, I fight the influence alcohol has over my life." On the contrary, people who are weakly identified with the drug and alcohol community may interpret the same behaviour quite differently: as passive compliance to the rules of the community. They would thus experience low levels of personal autonomy in their behavioural choices.

In addition to a sense of personal autonomy that is determined and affected by one's social identities (e.g., Tajfel & Turner, 1979), dynamics *within* the group can play a role in developing a sense of personal autonomy. Indeed, recent research in small and interactive groups has shown that working collaboratively on a task may not only improve group solidarity, but also one's experience of being personally valuable (Koudenburg et al; 2015). Thus, rather than restricting members' personal autonomy, such groups flourish by the individualized contributions of each of their members (see also Jans, Postmes, & Van der Zee, 2011; Koudenburg, Postmes, Gordijn, in press; Postmes, Spears, Lee, & Novak, 2005).

Group interventions often take place in interactive settings that include different forms of cooperation, e.g., sharing personal insights or experiences, providing feedback and support. Aside from encouraging feelings of we-ness, such cooperative activities also provide a platform for group members to develop themselves as individuals. Within a therapeutic community, people get to know each other and the community provides a secure context in which members can interactively construct coherent social and personal identities.

Thus, the typical form of group interventions allows for evolution of both social and personal identities, which can together contribute to a stronger sense of personal autonomy.

The present research

The current study is to our knowledge the first to examine the relation between social inclusion and personal autonomy in the context of disadvantage. Aside from the unusual context, our study also addresses an important novel theoretical hypothesis. We hypothesize that feeling included in an intervention group leads to an increased sense of personal autonomy, which is harnessed and boosted when people belong to and interact with the group. Whereas previous research has shown that in small and interactive groups, individuality can serve as input for the formation of a group's social identity (Koudenburg et al., 2015, Postmes, Haslam, & Swaab, 2005), the present research takes this one step further by studying whether inclusion in social groups can lead to an increased sense of autonomy. Small and interactive groups are ideally suited to study these processes because it is in such contexts that participants are provided with ample opportunity to develop and negotiate the group's social identity (inductive identity formation; Postmes et al., 2005), and because it can serve as a social platform for developing, negotiating, and validating their personal identities. The extent to which they feel included in this group is therefore expected to predict their ability to develop a sense of themselves as personally autonomous individuals."

A further contribution of the present research is that it for the first time examines whether fostering autonomy can be a key factor in the group's remedial influence on self-efficacy. We examine this relationship in a longitudinal design, because this design allows us to address the predictive value of feelings of inclusion for the experience of autonomy at a later point in time.

In Study 1, we used an outcome measure that is closely related to self-efficacy: Hope. Similar to self-efficacy, hope has been shown to facilitate positive outcomes in multiple

domains (e.g., mental health, coping ability; Magaletta & Oliver, 1999; Snyder, 2002). Self-efficacy and hope are both conceptualized (and measured) as the expectancy of an outcome and the expected efficacy to reach this outcome. Hope is thus quite similar to self-efficacy, but it is also unique in a number of ways. In particular, the concepts vary in their level of specificity: Whereas self-efficacy relates to attaining specific situational goals, hope is more generally concerned with one's overall capabilities to achieve goals, as well as to produce alternate routes to goals (Snyder, 2002). Assessing different, but closely related, concepts across studies allowed us to test whether personal autonomy would both predict more general and more specific efficacy beliefs. Therefore, in Study 2, we employed the Self-Efficacy Scale by Schwarzer and Jerusalem (1995).

We test the hypotheses in two field studies.[1] Study 1 was conducted at a residential alcohol and drug rehabilitation centre, and Study 2 included participants who took part in recreational group activities that were organized for members from different vulnerable groups in society. In both studies, we tested the complete model. Specifically, we examined whether social inclusion at Time 1 predicted personal autonomy at Time 2 (Hypothesis 1). Additionally, we hypothesized that autonomy at Time 2 would in turn predict self-efficacy/hope at Time 2 (Hypothesis 2), after controlling for baseline levels of self-efficacy/hope at Time 1.

Study 1

Method

Participants and procedure. All participants were recruited from a residential alcohol and drug rehabilitation centre in Australia. Data were collected at three time points, and participants were offered chocolate or a soft drink in compensation for their time. The baseline measure (Time 0) was conducted within the first week after the participants entered

[1] Both studies were cleared in accordance with the ethical review processes of the University of Queensland and within the guidelines of the Australian National Statement on Ethical Conduct in Human Research.

the rehabilitation centre. Measurement 0, 1, and 2 were conducted at fortnightly intervals. Because it was expected that it would take some time before people in the rehabilitation centre would become part of a community, we were most interested in feelings of inclusion and autonomy at Time 1 and 2, rather than at baseline.[2] The present paper will therefore concentrate on these measurements. Eighty-Eight participants completed the Time 1 questionnaire, of which 68 participants filled out the T2 questionnaire (attrition rate of 23%). The final sample included 42 male and 26 female participants with ages ranging from 22 to 63 years (M = 36.21, SD = 11.61). The majority (n = 59) were separated, divorced or had never been married. In addition, 78% indicated they were employed, and the mean years of education completed was 10.81 (SD = 1.84; General Educational Development in Australia is 12 years). Ninety percent of the participants had been hospitalized at least once in their lives: The median number of hospitalizations was five, and 19% of the participants indicated that they were hospitalized more than ten times. In the 30 days prior to the study, twelve participants had spent time in jail and nine had been in either medical or psychiatric institutions.

Measures. At baseline, domains of socio-demographics, relationships, medical health, psychiatric health, substance misuse, and legal/forensic variables were assessed with a semi-structured interview completing the Addiction Severity Index5 (McLellan, Cacciola, Alterman, Rikoon, & Carise, 2006).

The following measures were similar across T1 and T2. First, we administered the psychological needs satisfaction scale (Sheldon & Bettencourt, 2002), which is divided into five subscales, each consisting of three items rated on 7-point scales (1 = *not at all*, 7 = *very much*). This scale was developed to predict well-being, and it has been validated and used reliably in many different settings (exercise, at work, at school) including in many clinical

[2] The Psychological Needs Satisfaction Scale and Hope Scale were assessed at all three time points.

samples (e.g., Talley, Molix, Schlegel, & Bettencourt, 2010; Dwyer, et al., 2011). The subscales relevant for this study were inclusion (e.g., "How included do you feel in this community?", To what extent do you feel well-integrated into this community?", "To what extent do you feel a sense of belonging to the community?", Cronbach's α T1 =.88, T2 =.90) and personal autonomy (i.e., "To what extent does this community membership allow you to express your true self?", "How much do you act as you want (and not as others want) as you do things in this community?", and "How much to do feel that participation in this community is your own free choice?", Cronbach's α T1 =.64, T2 =.85).

Then, we employed the 12-item Hope Scale, which has been validated among different samples of people in psychological treatment (Snyder et al., 1991). This scale measures both efficacy expectations (i.e. agency subscale: "I meet the goals that I set for myself"), and outcome expectations (i.e. pathway subscale: "Even when others get discouraged, I know I can find a way to solve the problem). Participants indicated their agreement with each of the items on 8-point Likert scales (1 = *definitely false*, 8 = *definitely true*). The correlation between subscales was .40 at T1, and .67 at T2. Because both subscales produced similar results, we combined them into a single indicator of *hope* (Cronbach's α T1 =.80, T2 =.92).[3]

Results

Providing some evidence that attrition was not systematic, analyses revealed no significant differences on any measure between T1 participants who continued to participate at T2, and T1 participants who did not complete the T2 questionnaire (all $F < 1$, *ns*).

[3] Both Study 1 and Study 2 were part of a larger research program and the dependent variables we report here were embedded in a larger questionnaire. For other papers that resulted from these programs, see Cruwys et al. (2014b), and Dingle et al. (2015).

Comparing the mean levels of hope at T1 (M = 5.35, SD = 1.06) with those at T2 (M = 5.58, SD = 1.41) showed a marginally significant increase over time, $t(42)= 1.78$, p =.08.[4]

To test hypothesis 1, we regressed autonomy T2 (M = 5.02, SD = 1.24) on inclusion T1 (M = 5.65, SD = .85). As hypothesized, inclusion T1 significantly predicted feelings of autonomy T2, β =.53, $t(65)= 4.98$, $p<.001$.

To test hypothesis 2, we used the guidelines for bootstrapping analysis (Hayes, 2013) to probe the indirect effect of inclusion T1, via autonomy T2 on hope T2. Hypothesis 2 was tested only including the 43 participants who completed both hope measures. Among this smaller sample, inclusion T1 still significantly predicted feelings of autonomy T2, β =.57, $t(42)= 4.46$, p <.001. Inclusion T1 was a marginally significant predictor of hope T2, β =.29, $t(42)= 1.96$, p =.057. This effect disappeared when autonomy T2 was added to the model, t < 1, *ns*. To test the indirect effect, hope T2 was regressed upon autonomy T2, inclusion T1, and hope T1. As predicted, autonomy T2 significantly predicted hope T2, β =.33, $t(42)= 3.27$, p =.002. Finally, the 95% bootstrapped confidence interval for the indirect effect of inclusion T1, via autonomy T2 on hope T2 did not include zero, β =.19, 95% CI[.06;.41], suggesting a reliable indirect effect, see Figure 1.[5]

Discussion

Study 1 shows that a sense of inclusion in a group can promote feelings of personal autonomy among residents of an alcohol and drug therapeutic community. Thus, rather than undermining personal autonomy, inclusion in groups can strengthen it.

In addition, Study 1 provides support for the hypothesized model that autonomy is promoted by inclusion, which in turn leads to an increased sense of hope: the belief that one has the will and ways to reach goals. The data showed a significant positive indirect effect of

[4] Because of an error in the data collection process, only 43 participants completed both hope measures.
[5] The reverse mediational path, estimating the effect of inclusion at T1 via hope at T2 on autonomy at T2 was smaller, but also reached significance: β = .10, 95% CI[.014;.260].

inclusion via autonomy on participants' levels of hope. That is, belonging to a social group gives people a more positive outlook on the future in terms of goal-directed energy (i.e. agency subscale) and enhanced planning to accomplish goals (i.e. pathway subscale).

Study 2

Study 2 aimed to replicate Study 1 and examined the generalizability of the Study 1 findings. In Study 2 we included a sample of people were engaged in joined activities, but did not live together. Moreover, to examine the longevity and robustness of the changes in autonomy and self-efficacy, our second measurement in Study 2 occurred after three months. Instead of the Hope-Scale used in Study 1, in Study 2, we assessed self-efficacy with the Self-Efficacy scale by Schwarzer and Jerusalem (1995).

Method

Participants and procedure. Participants were recruited at recreational activities for socioeconomically disadvantaged members of society, which were offered by a community organisation (Reclink) in Australia. Reclink describes its target population as "the most vulnerable and isolated people–those experiencing mental health challenges, disability, homelessness, substance abuse, culturally and linguistically diverse communities, correctional services and economic hardship" (Reclink Australia, 2015). Participation in the activities is by referral from different institutions (e.g., centre for chronic mental illness, immigrant support services, disability services, and women's health centre). Data were collected within the first few weeks after people had joined the activities (Time 1) and three months later (Time 2). Participants were offered $10 compensation for their time at T1, and $20 at T2.

One hundred and five participants completed the T1-questionnaire, of which 48 completed the T2-questionnaire three months later (attrition rate of 54%). The final sample included 38 female and 10 male participants with ages ranging from 19 to 70 years (*M* =

45.38, *SD* = 13.41). The majority of participants were unemployed (79%). Participants were engaged in one of four activities, Futsal (i.e., indoor soccer, n = 10), yoga (n = 23), art (n = 9), and sewing (n = 6). Activities were organised every week, with high attendance (80% of participants indicated attending every week).

Measures. The measures used at T1 and T2 were identical. First, demographic information was assessed followed by several questions regarding physical and mental health including smoking status, amount and importance of physical activity, physical health problems and treatments, and mental health problems and treatments.

After these measures, we administered the psychological needs satisfaction scale (Sheldon & Bettencourt, 2002), to measure personal autonomy (Cronbach's α T1 =.69, T2 =.40[6]) and inclusion in their specific groups (Cronbach's α T1 =.96, T2 =.95). Then, participants completed the 10-item self-efficacy scale (Schwarzer & Jerusalem, 1995; e.g., "If I am in trouble, I can usually think of a solution", Cronbach's α T1 =.91, T2 =.92). Participants indicated on 7-point Likert scales to what extent the items applied to them (1 = *not at all*, 7 = *completely*).

Results

Analyses revealed no significant differences on any measure between T1 participants who continued to participate at T2, and T1 participants who did not complete the T2 questionnaire (all *p*s >.20). Table 1 presents the descriptive statistics for the variables on T1 and T2. Comparing the mean levels of self-efficacy at T1[7] (*M* = 2.96, *SD* =.60) with those at T2 (*M* = 3.09, *SE* =.57) revealed a marginally significant increase in self-efficacy over time, $t(46)=1.72$, p =.092.

[6] The low Cronbach's alpha at T2 may be due to the different character of the activities that participants were involved in (futsal, yoga, art, sewing). Inter-item correlations were low between items 2 and 3 (r =.07), but the correlations between item 1 and 2 (r =.23) , and between 1 and 3 (r =.28) were sufficient (following the guidelines of Clark & Watson, 1995; i.e., between .15 and .50). Thus, based on the correlations and because this is a validated scale (Sheldon & Bettencourt, 2002) we decided not to remove any items from the scale.

[7] Two participants did not complete the self-efficacy scale at T1.

We used multilevel analysis (Mixed Model Analysis in SPSS) to correct for the interdependence of the data due to group membership. As predicted, inclusion T1 (M = 5.18, SE = 1.49) positively predicted autonomy T2 (M = 6.11, SE =.85), γ =.28, $t(48)$= 2.00, p =.05. Autonomy T2 in turn, was marginally positively associated with self-efficacy T2, when self-efficacy T1 and inclusion at T1 were also included in the model, γ =.24, $t(46)$= 1.92, p =.06. There was no direct relation between inclusion T1 and self-efficacy T2, $t < 1$, *ns*. Importantly however, unilevel bootstrapping analysis (Hayes, 2013) revealed a significant indirect effect of inclusion T1 via autonomy T2 on self-efficacy T2, β =.06, SE =.04, 95% CI[.004;.186], after controlling for self-efficacy T1, see Figure 2.[8]

Discussion

Study 2 thus replicates the effect of Study 1 in another vulnerable sample. We show that the positive effects of inclusion in groups extends beyond people admitted in a rehabilitation centre, to those who take part in organised group activities only once a week. Specifically, the experience of group inclusion during activities such as futsal, sewing, yoga, or art, positively predicts ones feelings of personal autonomy three months later. Moreover, through increased feelings of autonomy, the experience of inclusion indirectly fosters positive outcomes, such as self-efficacy.

General Discussion

The present paper examines the relationship between social inclusion and autonomy in two longitudinal studies among disadvantaged groups in society. Both studies show that social inclusion increases a sense of personal autonomy, which in turn fosters self-efficacy, and hope more generally. This finding suggests that rather than creating social pressure, group interventions can stimulate the development of personal autonomy in individuals. We

[8] The indirect analysis was conducted at the individual level. The reverse mediational path, estimating the effect of inclusion at T1 via self-efficacy at T2 on autonomy at T2 was not significant, b =.01, SE =.02, 95% CI[-.016;.090].

suggest that different processes play a role here. Inclusion in social groups can strengthen one's sense of self by providing meaning to "who we are" (Jetten et al., 2008) and with that, strengthen the experience of one's decisions as autonomous. On the other hand, the group can serve as a social platform to strengthen members' sense of personal autonomy. Through social interaction, group members may learn about the ways in which they can uniquely contribute to the group, stimulate their perceptions of oneself as unique and autonomous individuals (cf., Koudenburg et al., 2015; Koudenburg et al., in press)

These results extend the correlational findings by Sheldon and Bettencourt (2002; Bettencourt & Sheldon, 2001), which show that self-based needs and socially based needs are positively associated. The present study provides longitudinal support for the hypothesis that social inclusion strengthens a sense of personal autonomy. Note however that this finding does not rule out the opposite causal relation in which personal autonomy strengthens social inclusion. It is indeed possible that those who experience personal autonomy are more likely to engage in behaviours that foster positive relations and group memberships (e.g., making contact with others, choosing who to spend time with). However, the results provide only limited support for this pathway[9], leading us to prioritize our initial explanation.

Although the data support our hypothesized model, the results should be interpreted with some caution. The sample sizes of both studies were small and attrition rates were high. Importantly though, in both studies the participants who completed the second measurement did not differ at baseline from those who dropped out. Although we cannot exclude the possibility that drop outs may have differed from the other participants on other measures, we are confident that at least on the variables relevant for this research, our targeted population is representative. Note too that our choice to examine a specific group of people, those who are

[9] We found (marginally) significant effects of T1 autonomy on T2 inclusion in both studies (Study 1: t(43)= 2.40, p=.02; Study 2: t(46)= 2.01, p=.051). However, neither of the studies revealed an indirect effect of T1 autonomy via T2 inclusion on hope/self-efficacy (Study 1: b=.08, SE=.06, 95% CI[-.008;.226], Study 2: b=.01, SE=.03, 95% CI[-.026;.107]).

especially vulnerable to mental health problems, limits the generalizability of our results. However, in that way, the studies provide a unique insight in those populations that may benefit most from social connections, because of their increased risk for both mental health problems and social isolation (SANE_Australia, 2010; Shibusawa & Padgett, 2009).

Conclusion

People that suffer from disadvantages such as homelessness or substance addictions often feel disenfranchised and disempowered (e.g., Clark & Nothwehr, 1999). The present research shows that organizing group activities can be an effective route to empower these individuals. The present studies reveal that the experience of social inclusion increases feelings of personal autonomy among these vulnerable populations, which provides them with a sense of self-efficacy that is potentially an important first step to improving their situation.

References

Abusabha, R. & Achterberg, C. (1997). Review of self-efficacy and locus of control for nutrition-and health-related behavior. *Journal of the American Dietetic Association, 97*(10), 1122-1132.

Andresen, R., Oades, L. G., & Caputi, P. (2011). *Psychological recovery: Beyond mental illness*. UK: Chichester: John Wiley & Sons, Ltd.

Aneshensel, C. S., & Stone, J. D. (1982). Stress and depression: A test of the buffering model of social support. *Archives of General Psychiatry, 39(12),* 1392-1396.

Asch, S. E. (1951). Effects of group pressure upon the modification and distortion of judgments. In H. Guetzkow (Ed.), *Groups, Leadership, and Men.* (pp. 222-236). Pittsburgh: Carnegie Press.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84(2),* 191-215.

Bettencourt, B., & Sheldon, K. (2001). Social roles as mechanism for psychological need satisfaction within social groups. *Journal of personality and social psychology, 81*(6), 1131.

Brewer, M. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin, 17*, 475-482.

Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity and compliance. In D. Gilbert, S. Fiske & G. Lindzey (Eds.), *The handbook of social psychology (4th ed.),* vol. 2: 151–192. New York: McGraw-Hill.

Clark, D. O., & Nothwehr, F. (1999). Exercise self-efficacy and its correlates among socioeconomically disadvantaged older adults. *Health education & behavior*, *26*(4), 535-546.

Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment, 7*, 309-319.

Codol, J.-P. (1975). On the so-called "superior conformity of the self' behavior: Twenty experimental investigations. *European Journal of Social Psychology, 5*, 457-501.

Cruwys, T., Dingle, G. A., Haslam, C., Haslam, S. A., Jetten, J., & Morton, T. A. (2013). Social group memberships protect against future depression, alleviate depression symptoms and prevent depression relapse. *Social Science & Medicine*, *98*, 179-186.

Cruwys, T., Haslam, S. A., Dingle, G. A., Haslam, C., & Jetten, J. (2014a). Depression and social identity: An integrative review. *Personality and Social Psychology Review, 18(3),* 215–238.

Cruwys, T., Haslam, S. A., Dingle, G. A., Jetten, J., Hornsey, M. J., Chong, E. D., & Oei, T. P. (2014b). Feeling connected again: Interventions that increase social identification reduce depression symptoms in community and clinical settings. *Journal of affective disorders, 159*, 139-146.

Deci, E. L., & Ryan, R. M. (1985). The General Causality Orientations Scale: Self-determination in personality. *Journal of Research in Personality, 19,* 109–134.

Deci, E. L., & Ryan, R. M. (1987). The support of autonomy and the control of behavior. *Journal of personality and social psychology*, *53*(6), 1024-1037.

Deutsch, M., & Gerard, H. B. (1955). A study of normative and informational social influences upon individual judgment. *Journal of abnormal and social psychology, 51*(3), 629-636.

Dingle, G. A., Brander, C., Ballantyne, J., & Baker, F. A. (2013). 'To be heard': The social and mental health benefits of choir singing for disadvantaged adults. *Psychology of Music, 41*(4), 405-421.

Dingle, G. A., Cruwys, T., & Frings, D. (2015). Social identities as pathways into and out of addiction. *Frontiers in Psychology, 6,* 1795. doi: 10.3389/fpsyg.2015.01795.

Dingle, G. A., Stark, C., Cruwys, T. & Best, D. (2015) Breaking good: breaking ties with social groups may be good for recovery from substance misuse. *British Journal of Social Psychology, 54,* 236-254.

Dwyer, L. A., Hornsey, M. J., Smith, L. G., Oei, T. P., & Dingle, G. A. (2011). Participant autonomy in cognitive behavioral group therapy: An integration of self-determination and cognitive behavioral theories. *Journal of Social and Clinical Psychology*, *30*(1), 24-46.

Gleibs, I. H., Haslam, C., Haslam, S. A., & Jones, J. M. (2011a). Water clubs in residential care: Is it the water or the club that enhances health and well-being?. *Psychology & health*, *26*(10), 1361-1377.

Gleibs, I. H., Haslam, C., Jones, J. M., Haslam, S. A., McNeill, J., & Connolly, H. (2011b). No country for old men? The role of a 'Gentlemen's Club' in promoting social engagement and psychological well-being in residential care. *Aging & mental health*, *15*(4), 456-466.

Haslam, C., Haslam, S. A., Jetten, J., Bevins, A., Ravenscroft, S., & Tonks, J. (2010). The social treatment: The benefits of group interventions in residential care settings. *Psychology and Aging*, *25*(1), 157.

Havassy, B. E., Hall, S. M., & Wasserman, D. A. (1991). Social support and relapse: Commonalities among alcoholics, opiate users, and cigarette smokers. *Addictive behaviors*, *16*(5), 235-246.

Hayes, A.F. (2013). *An introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.

Hornsey, M. J., Dwyer, L., Oei, T. P. S., & Dingle, G. A. (2009). Group processes and outcomes in group psychotherapy: is it time to let go of "cohesiveness"? *International Journal of Group Psychotherapy,59*(2), 267- 278

Hornsey, M. J., & Jetten, J. (2004). The individual within the group: Balancing the need to belong with the need to be different. *Personality and Social Psychology Review*, *8*(3), 248-264.

Janis, I. L. (1982). *Groupthink: Psychological studies of policy decisions and fiascos (2nd ed.).* Boston: Houghton Mifflin.

Jans, L., Postmes, T., & Van der Zee, K. I. (2011). The Induction of Shared Identity: The Positive Role of Individual Distinctiveness for Groups. *Personality and Social Psychology Bulletin, 37,* 1130 – 1141. doi: 10.1177/0146167211407342.

Jetten, J., Haslam, C., & Haslam, S.A. (Eds.). (2012). *The social cure: Identity, health and well-being*. New York, NY: Psychology Press.

Jetten, J., Haslam, C., Pugliese, C., Tonks, J., & Haslam, S. A. (2010). Declining autobiographical memory and the loss of identity: Effects on well-being. *Journal of Clinical and Experimental Neuropsychology*, *32*(4), 408-416.

Jetten, J., & Postmes, T. (2006). I did it my way": Collective expressions of individualism. In T. Postmes & J. Jetten (Eds.). *Individuality and the group: Advances in social identity,* (pp. 116-136). London: SAGE Publications Limited.

Kawachi, I., & Berkman, L. F. (2001). Social ties and mental health. *Journal of Urban health, 78*(3), 458-467.

Kilpatrick, D. G., Koenen, K. C., Ruggiero, K. J., Acierno, R., Galea, S., Resnick, H. S., ... & Gelernter, J. (2007). The serotonin transporter genotype and social support and moderation of posttraumatic stress disorder and depression in hurricane-exposed adults. *The American journal of psychiatry*, *164*(11), 1693-1699.

Koudenburg, N., Postmes, T., Gordijn, E. H., & van Mourik Broekman, A. (2015). Uniform and Complementary Social Interaction: Distinct Pathways to Solidarity. *PloS one*, *10*(6), e0129061.

Koudenburg, N., Gordijn, E.H., & Postmes, T. (In Press). Beyond Content of Conversation: The Role of Conversational Form in the Emergence and Regulation of Social Structure. *Personality and Social Psychology Review. doi: 10.1177/1088868315626022*

Magaletta, P. R., & Oliver, J. M. (1999). The hope construct, will and ways: Their relative relations with self-efficacy, optimism, and general well-being. *Journal of Clinical Psychology, 55,* 539–551.

McCrady. B. S. (1986). The family in the change process. In W. R. Miller & N. Heather (Eds.). *Treating addictive behaviors (pp. 305-318).* New York: Plenum.

McDermut, W., Miller, I. W., & Brown, R. A. (2001). The Efficacy of Group Psychotherapy for Depression: A Meta-analysis and Review of the Empirical Research. *Clinical Psychology: Science and Practice*, *8*(1), 98-116.

McLellan, A. T., Cacciola, J. C., Alterman, A. I., Rikoon, S. H., & Carise, C. (2006). The Addiction Severity Index at 25: Origins, contributions and transitions. *The American Journal on Addictions, 15,* 113–124. doi:10.1080/10550490500528316

O'Leary, A. (1985). Self-efficacy and health. *Behaviour research and therapy*, *23*(4), 437-451.

Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., & Mullan, J. T. (1981). The stress process. *Journal of Health and Social Behavior, 22,* 337-356.

Postmes, T., & Jetten, J. (Eds.). (2006). *Individuality and the group: Advances in social identity*. London: SAGE Publications Limited.

Postmes, T., Spears, R., Lee, T., & Novak, R. (2005). Individuality and social influence in groups: Inductive and deductive routes to group identity. *Journal of Personality and Social Psychology, 89,* 747-763. doi:10.1037/0022-3514.89.5.747

Rodin, J., & Langer, E. J. (1977). Long-term effects of a control-relevant intervention with the institutionalized aged. *Journal of personality and social psychology*, *35*(12), 897-902.

Ruggiero, K. M., & Taylor, D. M. (1995). Coping with discrimination: How disadvantaged group members perceive the discrimination that confronts them. *Journal of Personality and Social Psychology*, *68*(5), 826.

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.

Seeman, M., Seeman, A., & Budros, A. (1988). Powerlessness, work, and community: A longitudinal study of alienation and alcohol use. *Journal of Health and Social Behavior, 29(3),* 185- 198

Seligman, M. E. (1975). *Helplessness: On depression, development, and death*. New York: WH Freeman/Times Books/Henry Holt & Co.

Sheldon, K. M., & Bettencourt, B. A. (2002). Psychological need-satisfaction and subjective well-being within social groups. *British Journal of Social Psychology, 41*, 25-38.

Sherif, M. (1936). *The psychology of social norms*. New York/London: Harper & brothers.

Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological inquiry*, *13*(4), 249-275.

Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., et al.(1991). The will and the ways: Development and validation of an individual-

differences measure of hope. *Journal of Personality and Social Psychology, 60*, 570-585.

Strickland, B. R. (1978). Internal-external expectancies and health-related behaviors. *Journal of Consulting and clinical Psychology, 46*(6), 1192-1211.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations (pp. 33–48).* Monterey, CA: Brooks/Cole.

Talley, A.E., Molix, L., Schlegel, R. & Bettencourt, B.A. (2010). The influence of breast cancer survivors' perceived partner social support and need satisfaction on depressive symptoms: A longitudinal analysis. *Psychology and Health, 25,* 433-449

Turner, J.C. (1982). Towards a cognitive redefinition of the social group. In H. Tajfel (Ed.), *Differentiation between social groups* (pp.15-40). Cambridge, England: Cambridge University Press.

Williams, G. C., Gagné, M., Ryan, R. M., & Deci, E. L. (2002). Facilitating autonomous motivation for smoking cessation. *Health Psychology, 21*, 40-50.

Figure 1. Path model for Study 1 assessing the indirect effect of inclusion T1 via autonomy T2 on hope T2, while controlling for Hope T1.

Standardized parameter estimates are shown, based on n = 43. * $p < .05$, ** $p < .01$, *** $p < .001$.

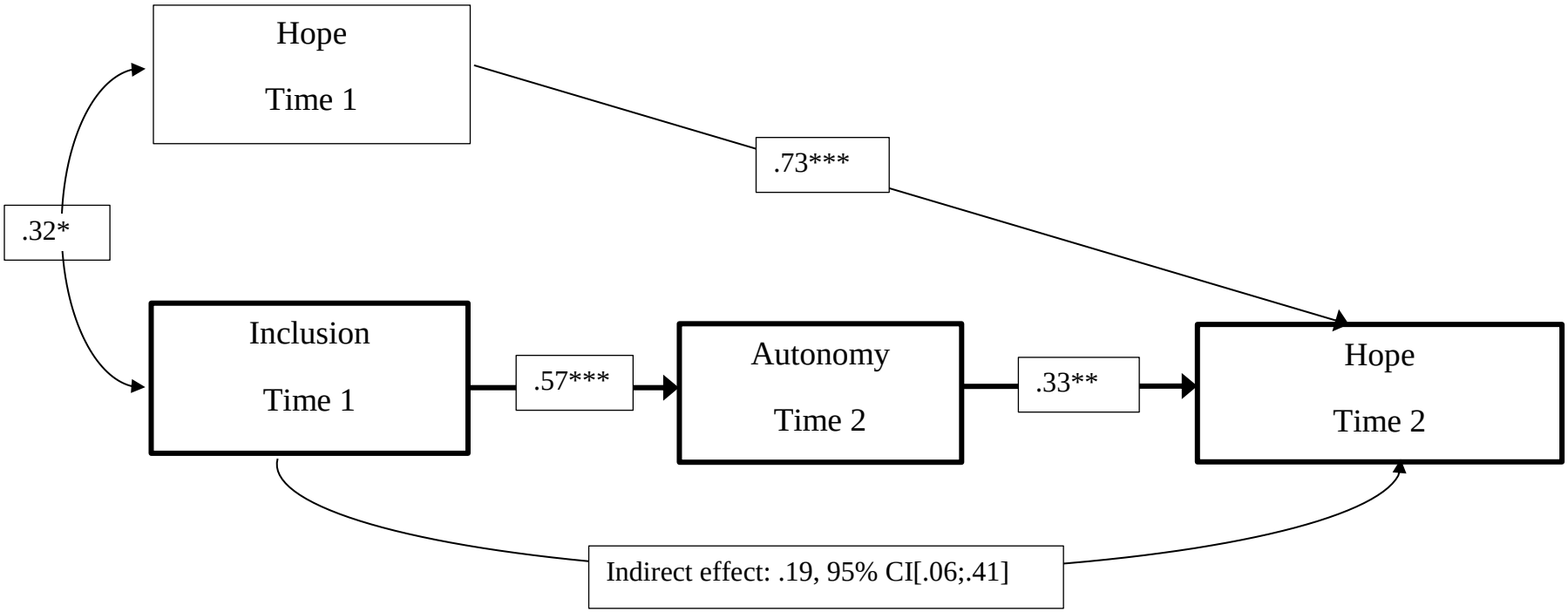

Figure 2. Path model for Study 2 assessing the indirect effect of inclusion T1 via autonomy T2 on self-efficacy T2, while controlling for self-efficacy T1. Standardized parameter estimates (based on n = 46) are displayed, with dashed lines indicating paths that are not statistically significant at p =.1. †p < .1, *p <.05, ** p < .01.